

First MEMS gyro packed into smarter iPhone 4

I-Micronews

According to EETimes, Apple (Cupertino, Calif.) continues to set the pace for its competitors by adding a three-axis MEMS gyroscope to complement its pioneering use of a MEMS accelerometer, which has since been universally adopted by other smartphone vendors. Likewise, by the 2010 holiday season, it is expected that all the major handset vendors will announce gyro-enabled smartphones.

Gyroscopes enable much more responsive user interfaces by allowing various motions to control action, a concept pioneered in the consumer market by Nintendo's MotionPlus add-on for its Wii video game controller. Now like the Wii, the iPhone can be used to recognize detailed gestures—such as air-signing a check—as well as allow its use as a 3D mouse when controlling a computer mouse or large screen TV.

Other MEMS and capacitive sensors quietly added by Apple to the new iPhone 4 will further enhance motion processing including a proximity sensor akin to Wii's sensor-bar, an ambient light sensor and dual noise-canceling-silicon microphones.

Apple's announcement was made Monday 7th June by founder Steve Jobs at the Worldwide Developers Conference in San Francisco, where 5,000 independent software writers responsible for some 225,000 iPhone apps listened his description of the new iPhone 4. Leading the 100 new features listed by Apple for its new iPhone 4 was the new iOS 4 operating system, which includes multitasking for the first time, and the fact that the iPhone is sharing the same processor as its iPad—the proprietary A4.

The new iPhone 4 is a tenth of an inch slimmer and thinner, but actually weighs two grams more. Its new screen has twice the old resolution (960-by-640 at 326 pixels per inch). Battery life has also been extended with "*40 percent more talk time*" claimed. Average talk time is now up from five hours to seven hours per charge, or you can do six hours of browsing over 3G networks or 10 hours of browsing over Wi-Fi. 40 hours of music playback and 300 hours on standby keeps it awake for over 12 days.

Two new digital cameras up the pixel count for stills to 5 megapixels from 3 megapixels in the iPhone 3G, adds an opposite side camera for video conferencing, can record HD video and works with a new movie app from the desktop world—iMovie for iPhone. Microsoft's Bing now works with the iPhone, but Google remains the default search engine. Also a new Netflix app for the iPhone was announced (available this summer) joining the already popular Netflix app for iPad.

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